



Investor CDP 2014 Information Request Philip Morris International

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

Philip Morris International Inc. (PMI) is the leading international tobacco company, with its headquarters in New York City, New York, U.S.A. and Operations Center in Lausanne, Switzerland.

On 31 December 2013, PMI owned and operated 53 manufacturing facilities and sold products in more than 180 markets.

In 2013, PMI recorded total cigarette shipment volume of 880 billion units, had revenues, including excise taxes, of US\$ 80 billion, and held 28.2% of the international cigarette market excluding the People's Republic of China and the U.S. PMI's 2013 adjusted operating company income (OCI) was US\$ 14.1 billion.

PMI has an unequalled brand portfolio led by Marlboro, the world's number one international selling cigarette brand, and L&M, the third most popular brand. Along with Marlboro and L&M, seven of our brands rank in the top 15 international cigarette brands in the world. We have a strong mix of international and local products that appeal to a wide range of adult smokers.

PMI's global workforce of more than 90,000 employees is extremely diverse. We have historically expanded our business through a mixture of organic growth, geographic expansion and acquisitions, and have a successful track record of acquiring and integrating companies.

PMI is driven by four key goals that guide us as we grow our business in a responsible manner. Those goals are to:

- meet the expectations of adult smokers by offering innovative tobacco products of the highest quality available in their preferred price category;
- generate superior returns to our stockholders through revenue, volume, income, and cash flow growth and a balanced program of dividends and share repurchases;
- reduce the harm caused by tobacco products by supporting comprehensive and effective regulation and by developing products with the potential to reduce the risk of tobacco-related diseases; and
- be a responsible corporate citizen and to conduct our business with the highest degree of integrity, at both a local and global level.

We are committed to responsibly delivering long-term sustainable growth and applying high standards wherever we operate. As the leading international cigarette company, we also aim to be an industry leader in environmental sustainability and have set clear and measurable targets to improve our environmental performance. In 2010, we set ourselves the goal of reducing CO2 emissions in our manufacturing facilities by 20% by 2015, and reducing the carbon footprint of our value chain by 30% by 2020.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Tue 01 Jan 2013 - Tue 31 Dec 2013

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response.

Select country
Argentina
Australia
Brazil
Canada
Colombia
Costa Rica
Czech Republic
Dominican Republic
Ecuador
Germany
Greece
Indonesia
Italy
Jordan
Kazakhstan
South Korea
Lithuania
Malaysia
Mexico
Netherlands
Pakistan
Philippines
Poland
Portugal
Romania
Russia
Senegal

Select country
Serbia
South Africa
Switzerland
Turkey
Ukraine
Venezuela
Rest of world

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

CC0.3 Rest of World – includes our vehicle fleet, offices (including our New York Headquarters) and aircraft emissions for which our data is not broken down by country.

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Senior Manager/Officer

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The highest level of direct responsibility for climate change within PMI lies with the Senior Vice-President Operations (SVP Operations) who is a member of the Senior Management Team and reports to PMI's Chief Executive Officer (CEO).

The SVP Operations also reviews PMI's objectives, strategies and action plans related to climate change with the Product Innovation and Regulatory Affairs Committee of the Board of Directors on a periodic basis.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
Corporate executive team	Monetary reward	The assessment of Environment, Health and Safety (EHS) results (which includes annual performance against our carbon footprint reduction targets) influences the annual performance rating of our SVP Operations and Director EHS&S. This directly affects the annual cash incentive compensation and long term restricted stock incentive compensation elements for those roles.
Management group	Monetary reward	Our CEO specifically covers EHS results (including carbon footprint reductions against targets) in the assessment of our annual company-wide performance that is reviewed by the Compensation and Leadership Development Committee of the Board of Directors. Accordingly, these results are included in our overall performance rating which determines the cash and stock bonus pool for the management group and other eligible employees.
All employees	Monetary reward	Specific company awards such as the Chairman's Award and Excellence Awards, which are either cash or stock, are available for Energy Managers, EHS Managers, project teams and other employees who are responsible for climate change related initiatives and improvements.
Energy managers	Monetary reward	Managers, team members and others have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all of our manufacturing facilities.
Environment/Sustainability managers	Monetary reward	Managers, team members and others have energy efficiency and carbon footprint reduction targets set out in their annual performance objectives and are assessed against those targets in their annual performance appraisal. Energy efficiency and CO2 emissions reduction targets are set annually for at least three years for all of our manufacturing facilities.
All employees	Monetary reward	Specific company awards such as "Above and Beyond the Call of Duty" (ABCD) awards for best practice initiatives in the areas of climate change, energy and carbon reduction.
Other: - employees in certain facilities such as our Operations Center	Monetary reward	Employees from the Operations Center are encouraged to use public transportation. The annual fee for half-price railway subscription as well as a monthly public transport allowance is paid by the company for those employees who choose to use public transportation rather than commute in their private cars to work.
All employees	Recognition (non-monetary)	In 2013, many affiliates continued to perform voluntary awareness and promotion campaigns/ programs in order to increase employees' active participation in EHS programs and to make carbon footprint reduction part of the company's culture. Awards and recognition for best practices form a core element of such campaigns.
Other: - employees in our Operations group (over 50,000 employees)	Recognition (non-monetary)	Operations employees also have the opportunity to earn awards for best practice initiatives in the areas of climate change, energy and carbon reduction. This forms part of our Operations "Lead, Lean and Learn" (3L) program which encourages innovation, continuous improvement and employee engagement.

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Individual/Sub-set of the Board or committee appointed by the Board	Global coverage with regional highlights: (Asia Pacific (AP), Latin America and Canada (LAC), Europe (EU) and Eastern Europe Middle East and Africa (EEMA).	> 6 years	

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Our climate change risk identification and management process covers our company's entire value chain. It addresses regulatory, physical climate and market risks and opportunities, which can include company reputation and changing customer demands through:

- Carbon footprint reduction initiatives: driving global programs to reduce our energy consumption and CO2 emissions which help to manage regulatory, reputational, and financial risk exposure. Programs include energy and CO2 reductions from our manufacturing operations and we review our progress annually. We update our carbon footprint every 2-3 years to ensure our risk/opportunity actions remain appropriate. For our products, key developments in cigarette/packaging components or new products are assessed by a Life Cycle Assessment (LCA) process to identify risks/opportunities which are then managed through our Product Development processes.

- Climate change risk assessment: We completed a comprehensive climate change risk assessment for our corporate and asset level risks and opportunities. The process included key assets such as factories and warehouses, supplier assets (including port facilities, warehouses, tobacco leaf growing regions and strategic suppliers). This information is reviewed periodically with top management and when new information emerges; it enables risk/opportunity identification and management at the company and asset level and includes geopolitical risk which may contain climate change components.

- Environmental risk assessments (ISO14001 based in most operations) at both company and asset level to identify material risks/ opportunities. Risk assessments include asset details such as the need for flood risk management plans which we discuss with our insurers and use to develop mitigation plans. In tobacco agriculture, the risk assessments form part of our Good Agricultural Practices program and result in risk/opportunity identification and management through country specific action plans.

CC2.1c

How do you prioritize the risks and opportunities identified?

Material issues are identified in a multidisciplinary way and include those which:

- have the highest potential impact and a realistic probability of occurrence;
- are most relevant to our enterprises and geographic locations; and
- are most important to our stakeholders.

We currently set a financial threshold of US\$100K for materiality of risk/opportunity at the asset level.

In 2020+ risk forecasting terms, higher level risks are defined as those with a potential impact of in excess of US\$2M or a raw material impact in excess of 1000 metric tonnes of tobacco leaf.

In carbon footprint terms we have initially prioritized actions for those areas of our business which constitute more than 5% of our footprint.

We review our risk/opportunity action plans and priorities every year during our integrated business planning process which includes 3-year and longer-term plans for our carbon footprint and climate change strategies. We use external sources such as consultancy and risk mapping tools as well as IPCC and academic publications to keep our information current.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

Reducing our impact on the environment is fundamental to our business. We do this with a commitment to the highest ethical standards and business integrity, through systems and processes, to deliver compliance and conduct efficient and effective operations worldwide. Climate change strategy is embedded in our overall business strategy as a key element of "Doing What is Right" which is at the core of our company Code of Conduct. It is integrated into normal business practices and forms part of our annual Long Range Planning process which reviews and sets business direction for 3 years and beyond. The corporate EHS team undertakes annual strategy development sessions with regional/business representatives, which are based on review of previous year performance, regulatory/external developments, risk/opportunity assessments, stakeholder interest and operational/other business changes. The strategy is developed through functional management teams up to the Senior Management Team including the CEO and when finally approved, the climate change strategy is communicated to regions and affiliates for integration into specific country strategies. Climate change strategy reviews are held during the year, including with the Product Innovation and Regulatory Affairs Committee of PMI's Board of Directors. Our strategy is split into two main areas:

- 1) Minimizing our impact on the environment through carbon footprint reduction initiatives.
- 2) Minimizing future environmental impact on our business through a climate change risk assessment process.

We used Life Cycle Assessment (LCA) to establish our carbon footprint, and found that the majority of our footprint comes from our scope 3 emissions, in particular the tobacco agriculture part of our value chain (~40% of our emissions). The size and importance of the carbon-related impact from each element of our business is a key input to our strategy development. We also completed a climate change risk assessment across our value chain and focus areas were identified. Our business depends on agriculture for key raw materials and therefore current and future changes in climate impacting sensitive crops (such as tobacco and clove) are important for our business strategy.

Short-term strategy components:

- 1) Continuing investment in reforestation and Good Agricultural Practices, which includes the development of country-specific action plans in 2012-13 to reduce impacts in the short-medium term including reducing wood use in tobacco curing, promoting efficient and sustainable consumption of wood/fuels and seeking alternative fuels.
- 2) Procuring materials such as paper/boards from sustainable sources.
- 3) Reducing our CO₂ from manufacturing operations by 20% by 2015 against our 2010 baseline.
- 4) Implementing a comprehensive Energy Management Program, including worldwide factory metering and targeting, energy assessments, key Energy Saving Projects (best practice cascading).
- 5) Implementing our renewable energy strategy which includes both green energy procurement and development of on-site renewable energy projects.
- 6) Reducing emissions and sharing best practices in Logistics and Distribution.
- 7) Revising our direct materials supplier program covering sustainability topics and related criteria, including joining the CDP Supply Chain program in 2013.
- 8) Undertaking LCAs of potential significant developments in cigarette and packaging components or potential new products.
- 9) Review/update of our carbon footprint every 2-3 years, continuing to measure the impact of developments in our business.
- 10) Review and refinement of our climate change risk assessment.

Long-term strategy:

Our long term commitment is to reduce our value chain carbon footprint by 30% by 2020 against our 2010 baseline. This will be supported by sustained implementation and development of many of the short term actions described above including reducing the need for wood/fuels for curing tobacco, increasing the proportion of sustainable wood used towards 100% and the use of biomass; we are already anticipating the continuation of several of our value chain strategy actions into the 2020-2025 horizon. Development of our climate change risk assessment will continue to inform future management decisions in terms of climate-related agricultural impacts and forecasted physical changes in business environments that may occur in certain climates and countries. Our agricultural supply chain is widely spread around the world, which helps to mitigate against climate related risks; tobacco crops can potentially be relocated if some growing areas become more favorable than others. In the long term we will also integrate our customer and supplier strategies for sustainability and climate change

to ensure that our entire value chain is aligned with our objectives.

How this strategy gains us strategic advantage:

As the leading international cigarette company, our climate change strategy has a key role in enabling our business efficiency which keeps us ahead of our competitors and supports our long term sustainability. Specifically, we have taken steps to align with our customer expectations on climate change including the development of our carbon footprint and our target to reduce that footprint by 30% by 2020. We will continue to work with trade customers, such as Tesco (Tesco Supply Chain strategy for carbon footprint reduction), to ensure that we exceed their expectations and are viewed advantageously in this area when doing business with them. In terms of our products, we make sure that we have the right information to take future decisions on potential strategic advantage by considering the environmental impacts of new products or product developments through LCA.

Substantial business decisions influenced by climate change:

- a) In 2013 we engaged and communicated more extensively on our climate change strategy including the development of new Sustainability and Climate Change pages on our website (pmi.com) in a project launched in Q1 2013.
- b) Development of an Energy Management Program which allows for a longer term return on investment approach when there are additional justified benefits such as climate change impact reduction. This program includes over US\$70M estimated investment in improvement projects between 2010 and 2015.
- c) Integrating our climate change strategy (through LCA) as part of our product development process and also including assessment of our portfolio of innovative Reduced-Risk Products to help ensure that their environmental impact is understood and managed in the early stages of product development.
- d) We have sophisticated capacity and footprint planning which helps mitigate against local or regional operations disturbances.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

- Trade associations
- Other

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Trans-Atlantic Business Council/Dialogue	Consistent	Their Energy and Climate Working Group states: "Energy is irreversibly tied to climate. In this realm, transatlantic coordination of energy policies and climate action targets could yield substantial results, as both the US and EU are the world's leading energy consumers."	Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.
National Center for Asia-Pacific Economic Cooperation	Consistent	APEC have supported the development of an energy strategy study which includes: "+Expand and Diversify Supply of Energy Resources; +Promote Conservation and Improve Efficiency; +Promote Open and	Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
		Efficient Energy Markets; +Clean Energy Use and Technology Innovation"	do we influence, trade association positions on climate change.
US ASEAN Business Council	Consistent	Their Energy Committee covers broad energy improvement topics including energy efficiency and renewables.	Our trade association memberships relate to specific business priorities which do not currently include climate change. We are not currently involved in, nor do we influence, trade association positions on climate change.

CC2.3g

Please provide details of the other engagement activities that you undertake

We work with NGOs and governments to support communities on environmental sustainability topics including sustainable forestry, reforestation, integrated pest management and controlled use of pesticides in agriculture, sustainable rural living conditions and education; all of which can have an influence on climate change improvement, adaptation and mitigation.

Through targeted contributions in 2013, PMI supported projects to protect and enhance natural resources, reforest the land, implement conservation agriculture, provide clean water, ensure food security, and improve the livelihoods of people living in rural communities. Selected examples include:

In 2013, in Japan, PMI supported initiatives to register Mt. Fuji as a UNESCO World Heritage site through working with NPOs and promoting employee volunteering. The supported initiatives included a project of the Fujisan Club to combat illegal dumping on the slopes of Mt. Fuji and promoting PMI employee volunteering initiative on Mt. Fuji clean-up. National Council on Mt. Fuji World Heritage implemented a project which was focused on raising public awareness about environmental issues which Mt. Fuji is facing. These efforts were part of the work which led to the decision of The World Heritage Committee of UNESCO to inscribe Mt. Fuji on the World Heritage List on June 22 2013.

In Indonesia, PMI continued to support the Mangrove Nursery and Productive Tree Planting program implemented by IDEP Foundation Selaras Alam. This project is focused on reforestation and raising community awareness about environmental preservation. As a result of the program in 2013, 135,000 trees were planted in seven areas of Indonesia.

In Malawi, Mozambique and Tanzania PMI partner with Total LandCare (TLC) on a multi-year initiative to preserve forests, build schools and provide villages with clean water, eco-pit latrines and fuel-efficient stoves. The work continued in 2013 and part of the project consists of planting tens of millions of trees for household fuel consumption. The program is expected to benefit around 75,000 households.

In the Philippines - a reforestation project involving local government units, suppliers and NGOs (non-governmental organizations) as well as schools. Around 2.5 million trees have been planted over the last 10 years. Other reforestation programs have also been supported in many countries around the world from Brazil to Pakistan to Indonesia.

CC2.3h

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

PMI operates within an overarching Code of Conduct to a set of internal policies - our Principles and Practices. These policies cover our mandatory requirements and processes in relation to Environment, Health and Safety (EHS), corporate contributions, and interaction with government officials, amongst others. Whilst trade association positions on climate change are not separately mentioned, we do conduct a general process of due-diligence to check potential compliance and reputational issues when joining trade associations.

Further Information

CC3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

Absolute and intensity targets

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
Abs1	Scope 1+2	28%	33%	2010	258898	2015	This covers conventional cigarette manufacturing facilities in our EU region where we are pursuing opportunities for renewable energy.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
Int1	Scope 1+2	81%	20%	Other: kg CO2 - equivalent / million cigarettes	2010	794	2015	This is a publicly declared target to reduce our emissions from our manufacturing facilities by 20% per million cigarettes equivalent by 2015, against our 2010 baseline.
Int2	Scope 1+2+3	100%	30%	Other: kg CO2 - equivalent / million cigarettes	2010	6324	2020	This is a publicly declared target to reduce our emissions from the entire value chain (Scope 1+2+3) by 30% per million cigarettes equivalent by 2020, against our 2010 baseline.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	22	Decrease	1	Scope 3 fuel and energy related activities
Int2	Decrease	25	Decrease	32	

CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Int1	60%	42%	In 2013 we achieved an 8.4% reduction in our manufacturing facilities against the 2010 baseline.
Int2	30%	5%	For Scope 1 + 2+ 3, we have quantified a reduction of at least 1.5%, mainly due to manufacturing improvements. We are substantiating further improvements but will only update the % complete (emissions) number every 2-3 years when we recalculate our carbon footprint.
Abs1	60%	24%	Launch of new green energy projects in 2013 will result in significant progress in 2014 and 2015.

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

No

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	687	
To be implemented*	135	65000
Implementation commenced*	102	12000
Implemented*	594	92000
Not to be implemented	450	

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative, years	Comment
Energy efficiency: Processes	Scope 1 and 2, Target Int 1, voluntary. EU - Poland, Krakow - Reduction of energy consumption due to simplification of processes in Primary section of manufacturing.	2500	200000	120000	<1 year	10	
	Scope 1, Target Int 1, voluntary. EU - Germany, Berlin - Installation of heat	800	210000	467000	1-3 years	10	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative, years	Comment
Energy efficiency: Processes	exchanger that transfers heat from process tail gas to a hot water system that supplies different air handling and ventilation systems.						
Energy efficiency: Processes	Scope 1 and 2, Target Int 1, voluntary. EEMA - Russia, IZHORA - Wet Cooling Towers were installed in place of dry coolers. This allowed the reduction of chiller power consumption and to increase chiller system refrigerating capacity.	750	1280000	990000	<1 year	10	
Energy efficiency: Processes	Scope 2, Target Int 1, voluntary. EEMA - Turkey, PHILSA - Conversion of constant speed type air handling unit fans to variable speed type by installing VSD (variable speed drives) to save electricity. 62 VSDs were installed on existing air handling units.	750	160000	115000	<1 year	10	
Low carbon energy purchase	Scope 1, Target Int 1 and Abs 1, voluntary. EU - Germany, Dresden - Installation of district heating supply in production area to eliminate heating with fuel oil.	740	0	0	<1 year	10	Monetary data not available - installation is part of a larger project.
Energy efficiency: Building services	Scope 2, Target Int 1, voluntary. EU - Greece, Papastratos - Replacement of traditional lamps with LED and simultaneous installation of motion sensors in Administration, Support and Printshop buildings.	420	80000	108000	1-3 years	5	
Energy efficiency: Processes	Scope 1 and 2, Target Int 1, voluntary. EU - Netherlands, BoZ - Reduction of energy consumption by switching off energy users during the idle time between batches in Primary section of manufacturing.	360	46000	51500	1-3 years	8	
Energy efficiency: Processes	Scope 1 and 2, Target Int 1, voluntary. EU - Netherlands, BoZ – Elimination of an inefficient process step in the Primary section of manufacturing and reducing process complexity.	630	319000	637000	1-3 years	8	
Energy efficiency: Processes	Scope 1 and 2, Target Int 1, voluntary. EU-Lithuania, Klaipeda – Implementation of a range of Energy Management Program initiatives including installation of centralized HVAC systems and process optimization.	1200	400000	600000	1-3 years	15	
Low carbon energy purchase	Scope 2, Target Abs 1, voluntary. General PMI project for our EU region covering targeted manufacturing centers to convert to	1200	0	15000		3	There is no monetary payback for this. Contract length is 3 years, however

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative, years	Comment
	low carbon electricity. This started in 2012 with incremental uptake of new projects in 2013 and significant developments planned for 2014-15.						it will likely continue beyond a single contract period.
Other	Scope 1 and 2, Target Int 1, voluntary. General PMI Energy Management Program including many projects of varying size beyond the individual projects exemplified in this section.	3000			1-3 years	5+	This consists of many projects of differing sizes and therefore specific monetary savings and investments are not separately provided. The typical payback is 1-3years and benefits will normally last at least 5 years.
Energy efficiency: Processes	Scope 1, Target Int 1, voluntary. EU - Netherlands, BoZ - Installation of additional heat exchangers to reduce Natural Gas consumption in Primary section of manufacturing. Tail/purge gas heat will be transferred to boiler feed water.	650	167000	254200	1-3 years	8	
Transportation: use	Scope 3, Target Int 2, voluntary. EEMA - Russia, Kuban - Switch of transportation mode for raw materials from land to sea for import deliveries. Loading factor optimization and use of "round-trips" approach for internal deliveries.	640	168000	0	<1 year	10	
Energy efficiency: Building services	Scope 2, Target Int 1, voluntary. EEMA - Russia, Kuban - Optimization of facility lighting to achieve required lighting levels with maximum energy efficiency. Solar tubes take advantage of natural day light for indoor lighting, particularly in warehouses. Combination of fluorescent for task lighting over link-ups and LED for background lighting and general lighting. Control lights through light detectors, motion sensors and timers.	330	95000	400000	4-10 years	5	
Energy efficiency: Building services	Scope 1 and 2, Target Int 1, voluntary. AP - Philippines, Marikina. General upgrades including: 1. Central Cooling systems 2. Steam Trap Monitoring System 3. Efficient Lighting 4. Heat Recovery for compressed air and other systems 5. Automation - BMS / BEMS 6. Solar Thermal Renewable Energy	9000	700000	3300000	4-10 years	5	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative, years	Comment
	7. Idle Mode for Equipment 8. Steam and Condensate System upgrade.						
Energy efficiency: Processes	Scope 3, Target Int 2, voluntary. Curing barn efficiency improvements in Brazil to reduce fuel wood consumption for tobacco curing. Over 350 new barns provided and over 250 existing barns upgraded.	60000	2500000	14000000	4-10 years	25	
Energy efficiency: Processes	Scope 3, Target Int 2, voluntary. Curing barn efficiency improvements in Philippines to reduce fuel wood consumption for tobacco curing. 25 new barns provided and 25 existing barns upgraded.	1760	23000	97500	4-10 years	15	
Low carbon energy installation	Scope 3, Target Int 2, voluntary. In Ecuador, tobacco curing barns are being equipped with a new heating system with indirect combustion: external furnace for biomass and internal pipe heating system. Use of palm oil nutshell as biomass enables the elimination of kerosene formerly used for tobacco curing.	1400		400000	4-10 years	up to 10 years	Annual monetary savings have not been specifically calculated but the payback is estimated at around 4 years.
Low carbon energy installation	Scope 3, Target Int 2, voluntary. In Malawi, replacing the use of coal (as a fuel for curing tobacco) with sustainably managed wood supplies.	6000					No monetary data available.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	Through our Energy Management Program (over US\$70M budget estimated from 2010-2015) which has been developed to achieve the energy reduction and related greenhouse gas emissions targets of 20% by 2015 compared to our 2010 baseline for our manufacturing affiliates (scope 1 & 2, target I1). Additionally, we have targeted a 30% reduction in our carbon footprint by 2020 compared to our 2010 baseline across our entire value chain (scope 1, 2 & 3, target I2).
Employee engagement	Through our objective setting, Long-Range Planning process and via employee communications, sharing of tools, guidance and best practices.
Compliance with regulatory requirements/standards	We take the opportunity of regulatory developments to achieve energy/emissions reductions (e.g. Switzerland - carbon tax exemption following a process upgrade) and in particular when investing in new processes/facilities (e.g. requirements for renewable energy or energy efficiency) for new facilities in Italy, Mexico and our UK offices.
Lower return on investment (ROI) specification	We consider a longer rate of return (4 years or more) for certain energy savings and renewable energy projects.
Other	The examples included in 3.3b above are just a few of the Good Agricultural Practices (GAP) activities implemented during 2013. GAP is broad program covering our tobacco suppliers in 4 themes – Governance, People, Crop and Environment. It includes programs such as Integrated Production Systems

Method	Comment
	which supports farmers to improve yield and farm efficiency on a variety of crops (particularly food crops), not just tobacco. Through GAP we have environmental improvement programs in all the countries where we source tobacco around the world. Additional examples include: • Argentina – barn improvement program including a pilot to add insulation to curing barn floors in 2013 and saving around 9% on energy consumption (pilot result). • Kenya – using bagasse (sugarcane residue – a biofuel) as a fuel source for tobacco curing with plans to have 70% of Kenyan fuel for PMI curing from biomass. • Italy – replacing diesel as a fuel for curing tobacco with cleaner fuels including biomass and natural gas. • Indonesia – using biofuels such as nut/palm oil kernels to cure tobacco.
Dedicated budget for other emissions reduction activities	We have developed a renewable energy strategy with an initial focus on low-carbon electricity uptake in the EU. We commenced the program in 2012 and have added facilities during 2013 with further planned low-carbon electricity procurement during 2014-15.

Further Information

Our Energy Management Program (EMP) has been developed to achieve energy reduction and related CO2 emissions targets of 20% by 2015 compared to our 2010 baseline for our manufacturing affiliates (scope 1 & 2, target Int1). Additionally, we have targeted a 30% reduction in our carbon footprint by 2020 compared to our 2010 baseline across our entire value chain (scope 1, 2 & 3, target Int2). The EMP consists of over 1000 energy reduction initiatives with a planned investment of over US\$ 70M between 2010 and 2015 which will result in savings of around 1,000MJ per million cigarette equivalent (approximately 1 million GJ of energy) and around 100kg CO2 per million cigarette equivalent (approximately 100,000 metric tonnes of CO2). The program is managed through an organizational structure of regional and sub-regional energy leaders. The energy coordinators, supported by the central Energy Management team with representatives from affiliates together with regional managers, are responsible for coordination of the development and alignment of local Long Range Plan targets as well as implementation of the initiatives. The scope of the EMP includes the following: • Implementation of a global energy metering & targeting system in all manufacturing affiliates. The combination of automatic-reading meters with software will provide all manufacturing facilities with the tools to better understand and monitor their energy consumption. We completed pilot studies in 3 manufacturing centers and have now rolled-out the program through which we expect to identify an additional 5% CO2 reduction potential. • Management of global energy saving initiatives: The major initiatives are managed systematically and centrally, which allows leveraging of existing knowledge and economies of scale through central procurement opportunities, which can help reduce the payback period of projects. For selected projects, it includes a feasibility assessment at some selected facilities, the compilation of results and the creation of standard procedures for global roll-out. The selection of the major initiatives for global roll-out is done by agreement between the energy leaders and Operations Center during specific workshops. All short-listed initiatives will go through feasibility assessment and standardization procedure including implementation guidelines. • Energy factory assessment: a tool for local initiatives identification. We have developed a factory energy assessment tool which is used to regularly evaluate new opportunities in utilities, process equipment, and manufacturing lay-out. This assessment contains checklists for behavioral as well as technical aspects. The assessment results in a set of recommendations which range from initiating a whole new project (which may require investment) to implementing very simple actions, where no investment is required (e.g.: stopping ventilation outside production hours). • Review of new technologies, including renewable energy. As part of our review of new technologies, we have assessed the applicability of renewable energy technologies in our different production locations with an external partner. The study is complemented by a tool to assess the feasibility of renewable energy initiatives and we undertook these feasibility studies at 3 different production sites, solar energy pilot equipment has been installed in several locations, for example at our Serbian manufacturing facility in 2013. • Engagement of our equipment suppliers. We are looking at improving our process equipment performance and are engaged in an industry colloquium with equipment suppliers to help improve the energy consumption of our equipment.

Page: CC4. Communication

CC4.1

Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Page/Section reference	Attach the document
In mainstream financial reports (complete)	Page 3: CEO on Environmental Performance in 2013. Page 7: 2013 Contributions & Environmental Sustainability	https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/CC4.1/PMI_2013 ANNUAL REPORT.pdf
In voluntary communications (complete)	Our corporate website, PMI.com: Sustainability section including Environmental Performance and Climate Change	https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/CC4.1/PMI_2013 SUSTAINABILITY.pdf

Further Information

On our corporate website under the Sustainability section, we describe our 20% reduction targets for CO2 by 2015 against our 2010 baseline and our commitment to reducing our overall value chain carbon footprint by 30% by 2020. Improvement examples, data and case studies are also provided and specific activities related to tobacco agriculture are described in the "Good Agricultural Practices" pages.

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your risks driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Fuel/energy taxes and regulations	In various countries around the world, there are electricity and fuel-related levies or taxes and also CO2 related taxes such as the climate change levy in the UK and the CO2 tax in Switzerland. We can expect such initiatives to increase.	Increased operational cost	3 to 6 years	Direct	Likely	Low	For our global operations, such levies and taxes are estimated at around US\$2M	We are managing these risks by having a comprehensive Energy Management Program (energy and CO2 reduction program), including ambitious CO2 reduction targets for our manufacturing facilities. This program can provide the basis for carbon tax exemptions (e.g. our Swiss affiliate is already exempted due to its energy reduction results) and reductions in the cost to comply with the EU ETS. Standards for the design of new facilities which include low carbon building design (e.g. low carbon building materials and	The costs associated are generally embedded in our Energy Management Program, with over US\$10M already committed specifically in energy monitoring and targeting. The wider best practice sharing approach and individual energy/CO2 saving projects are estimated to cost up to \$20M per year.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								energy efficient lighting) help minimize our risk exposure. Drivers like EU ETS and the Energy Efficiency Directive have led us to consider process changes in our factories, for example replacement of older combustion equipment to newer more efficient plant that can potentially reduce our energy load to beneath the 20MW regulatory threshold for our factory in Portugal. For a factory in Russia, following our internal energy and CO2 reduction targets means that the factory will already meet or exceed new state regulations such as the "Energy conservation and improving energy efficiency in the period up to 2020" law.	
Cap and trade schemes	CO2 related schemes such as the EU Emission Trading Scheme (EU ETS) are regulatory frameworks that pose risk of increased operating cost to PMI. PMI currently owns and operates 4 manufacturing centers (in Germany, Netherlands, Poland and Portugal with total verified emissions of over 30,000 metric tonnes of CO2 in 2013) that are covered by the EU ETS. We have other factories in the EU and	Increased operational cost	3 to 6 years	Direct	Likely	Low	Based on our current 4 EU ETS factories, the annual cost of emissions allowances is expected to increase by approximately \$100K in the next five years. The current cost is approximately \$100-150K per year.	As described above	As described above

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>EU accession countries which could also become subject to EU ETS following site developments or country accession to the EU in the future. Although the cost of EU ETS carbon credits have been lower in the past several years due to a large surplus of allowances, the cost of allowances is expected to increase due to stricter regulations and more significant long-term reforms to reduce oversupply. This could result in an increase in the operating cost of purchasing allowances in the future. There is a clear international trend towards stricter climate regulations. In addition to EU ETS, other countries and regions are considering and, in some cases, developing similar programs, compatible with EU ETS, in an effort to form a global carbon market. Tighter regulations in this area could indirectly influence our supply chain with regard to energy supply, and increase in electricity prices.</p>								
Product labeling regulations and standards	Regulations requiring carbon labelling on products could impact PMI for both its conventional cigarettes and its future Reduced-Risk Products (RRPs), which may include electronic components.	Increased operational cost	3 to 6 years	Direct	Unlikely	Low	Should product labeling be required for our future products we estimate a cost of over \$250K excluding any additional	We have purchased a Life Cycle Assessment (LCA) tool and have trained our staff in its use so that we can undertake these assessments in-house. With respect to our products, potential	The cost and use of the LCA software, with technical support, is approximately \$100K per year.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	The business effect could be in two categories a) increased operating cost and b) product differentiation (which could be an opportunity for PMI).						manufacturing costs associated with labeling.	significant developments in cigarette and packaging components or potential new products are assessed through a LCA process for risks and opportunities in relation to our carbon footprint.	
Product labeling regulations and standards	Linked to RR3, currently there are no global, climate change-related, labeling standards that could coherently be applied to tobacco products. If such requirements were introduced then uneven or inconsistent implementation by regulators could result in some adverse impacts on PMI.	Reduced demand for goods/services	3 to 6 years	Direct	Unlikely	Low	Should product labeling be required for our future products we estimate a cost of over \$250K excluding any additional manufacturing costs associated with labeling.	As described above	As described above
General environmental regulations, including planning	Many of our factories are subject to general environmental regulations, including emissions limits and permitting. Any new factories and other facilities will need to ensure that environmental considerations are fully addressed at the design stage. For example, the Energy Efficiency Directive in the EU will have an impact on the design of new facilities that we are currently developing in Italy.	Increased capital cost	3 to 6 years	Direct	Likely	Low	Tighter environmental regulation in the future could cost over \$1M per year across our global facilities.	As described above	As described above
Emission reporting obligations	In various countries around the world we are subject to electricity and fuel related reporting obligations such as the National Greenhouse	Increased operational cost	3 to 6 years	Direct	Likely	Low	More environmental reporting obligations in the future could cost	As described above	As described above

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and Energy Reporting requirement in Australia and new tax code related regulations in the Ukraine and Germany.						approximately \$1M per year across our global facilities.		

CC5.1b

Please describe your risks that are driven by change in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	Supply Chain-Tobacco Leaf: Tobacco leaf growing is strongly influenced by physical climate change such as changes in temperature, precipitation and cyclones (hurricanes and typhoons). PMI sources tobacco from more than 30 countries across the world. Increased drought / flooding could disturb the tobacco leaf life cycle stages (seedling, transplanting, growing, harvesting). The yield, quality and availability of the tobacco crop could be influenced by the seasonal frequency and the intensity of such extreme rainfall events. This could change our crop buying pattern and result in increased operational cost. Extreme rainfall may require pumping of excess water, similarly, extreme droughts could require long-term irrigation, both of which increase energy consumption, and the tobacco production cost.	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Low-medium	Depending on the size of the area impacted, the financial implications would vary significantly, however the incremental financial implications from these risks are currently assessed to be low (less than 10 million US\$). However, in an extreme case where simultaneous crop failures or tobacco shortages occur the potential implications are around 100 million US\$; such a situation is very unlikely.	Our agricultural supply chain is widely spread around the world, which helps to mitigate against climate related risks; tobacco crops can also be relocated if some growing areas become more favorable than others. In addition, our substantial inventories of tobacco leaf can help to mitigate against short term impacts. Adjustments to our procurement patterns can also be made. Other tools that we use in identifying significant risks and/or opportunities from climate change include the following: Climate change risk assessments, Facility risk	The data from our risk assessments identifies key areas which could be the base of longer term actions. We have already identified our key assets at risk of climate change impacts (both PMI owned and in our entire value chain). We invested around US\$200,000 in this global risk assessment but the main costs in 2013 were internal time and resources. The cost of implementing GAP is estimated at several million US\$. Insurance costs are not specific to climate change.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>With respect to our supply chain, the transportation of raw materials and finished goods, as well as availability of ports could be interrupted; similarly damage to stocks in storage facilities such as warehouses would have knock-on impacts on the productivity of our manufacturing centers. Extreme rainfall could cause damage to buildings including our manufacturing centers which would increase our cost both in management and insurance fees. The risk of damaged goods and impacts on manufacturing centers and our supply chain could weaken our ability to efficiently supply products to our customers. Overall, the well-being of societies, for example farmers in tobacco growing areas, would be impacted. PMI's operations are widely spread, mitigating the effects of severe catastrophic climatic disruption. Furthermore, PMI's business continuity management plans are designed to mitigate the consequence of supply chain interruption and disruption caused by building damage, and or stock/material damage.</p>							<p>management (insurance assessments), Environmental risk assessments (ISO14001), Due Diligence Assessments and Good Agricultural Practices (GAP) Assessments and implementation. The results of such assessments are used to inform our long term business planning.</p>	
<p>Change in precipitation extremes and droughts</p>	<p>Supply Chain- Acetate Tow and Pulp: The acetate tow market is tight with a capacity utilization of over 90%, and acetate facilities (several based in</p>	<p>Reduction/disruption in production capacity</p>	<p>>6 years</p>	<p>Direct</p>	<p>About as likely as not</p>	<p>Medium</p>	<p>Process as described above, financial implications are several million US\$.</p>	<p>Adjustments to our procurement patterns can be made and inventories managed. Other</p>	<p>As above</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>S.E. USA) face risks from cyclones, floods, and drought. If anything were to disrupt activities in acetate tow plants, acetate tow supply would be impacted, and disruptions to supply over several months would present challenges for PMI. Cyclones – S.E. USA is subject to cyclones which could disrupt acetate facilities and delay supply. Floods – S.E. USA area has suffered a number of flooding events in the past, and if the sites are vulnerable to flooding (i.e. low-lying, or near a body of water) they could face disruption. Drought – S.E. USA is more likely to be at risk of severe droughts by 2030. Water use in our supply chain may come under pressure if local water use is restricted to maintain reserves.</p>							<p>tools that we use in identifying significant risks and/or opportunities from climate change include the following: Climate change risk assessments, Facility risk management (insurance assessments), Environmental risk assessments (ISO14001), Due Diligence Assessments and Good Agricultural Practices (GAP) Assessments and implementation. The results of such assessments are used to inform our long term business planning.</p>	
<p>Change in precipitation extremes and droughts</p>	<p>Supply Chain: Clove is an important raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves. It takes at least 5-7 years for clove trees to become productive and 20-40 years before they reach peak production. Yields are complex; harvests can vary by up to 60% over a 4 year harvest cycle. Clove production is weather sensitive, and climate changes such as intensification of the wet season would impact clove growing areas (such</p>	<p>Reduction/disruption in production capacity</p>	<p>>6 years</p>	<p>Direct</p>	<p>About as likely as not</p>	<p>Low-medium</p>	<p>As for Leaf above</p>	<p>As for Leaf above</p>	<p>As above</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>as damages to bud development; more pest and disease problems from increased rainfall, and oscillation between drought / flooding presenting difficulties to small scale farmers and clove trees). This would reduce the supply and increase the price of cloves.</p>								
<p>Change in mean (average) temperature</p>	<p>A change in the mean (average) temperature could affect our own operations and those of our suppliers globally (manufacturing, agriculture and other business operations). In terms of agricultural impact, the quality and yield of tobacco crop and other raw materials we use could be affected. While a slight increase in average temperature can lengthen the growing season in some regions, it can adversely impact the yield and quality of the crop where summers are long and already hot. An increase of average temperature may cause drought, which in turn results in crops needing irrigation. This would impact our energy consumption, and the tobacco production cost. Overall, change in mean (average) temperatures from climate change would also increase the use of air conditioning or heating systems, leading to increases in demand for energy.</p>	<p>Increased operational cost</p>	<p>>6 years</p>	<p>Direct</p>	<p>Virtually certain</p>	<p>Low-medium</p>	<p>As for Leaf above</p>	<p>As for Leaf above</p>	<p>As above</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Sea level rise	<p>Rising sea levels in leaf growing areas, as well as near to manufacturing and warehouse centers (e.g. the Netherlands, and some Asian manufacturing centers), could impact our leaf sourcing (yields and quality) and disrupt our supply chain distribution. This could cause sourcing delays and manufacturing impacts which would result in reduction/disruption to production volumes. Rising sea levels could also impact ground water, which is used for consumption and irrigation. Water treatment processes (chemical/physical) for consumption, irrigation and for manufacturing use could be costly and increase our energy consumption. Rising sea levels could also leave people (farmers, manufacturing employees, and others) who live in low lying areas in danger of being flooded, resulting in people movement.</p>	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Low	<p>The financial implications of these risks vary depending on the asset that is impacted. The threat of flooding in the Netherlands and cyclones in the Philippines could cause damage in our manufacturing and warehouse sites (estimate US\$10-20M for each location). Damage to raw materials and finished goods could escalate to around US\$100M but that is considered very unlikely.</p>	As above	As above
Induced changes in natural resources	<p>Change in climatic variability and extreme events such as changes in the frequency and severity of heat waves, drought, floods and hurricanes could affect the distribution of pests and beneficial predators. This could affect the yield and quality of tobacco crops and of other raw materials we use. Areas</p>	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Low	As for Leaf above	As for Leaf above	As above

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	at increased risk may include China, the Philippines, some African countries and the Eastern USA where we source tobacco.								

CC5.1c

Please describe your risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
Changing consumer behaviour	Today's consumers expect to see more sustainable products with a lower environmental impact. Ever increasing environmental awareness of consumers influences their product selection and buying decisions. It is widely believed that consumers will continue to place increased value on recyclability and the perceived environmental credentials of packaging – at the same time, demand for proof of sustainability claims could grow, for instance in the demand for LCA data. Practices that impact climate change could be seen as a brand differentiator for consumers and the	Reduced demand for goods/services	>6 years	Direct	Unlikely	Low-medium	Environmental reputation may become a more significant factor in our customers' purchasing decisions in the future, but at this time, we do not see this risk as significant. We are also aware that regulatory and reputational risk may impact the decisions of our stakeholders, specifically our consumers and shareholders. If these risks were to materialize then they could impact our business by several millions of dollars.	Corporate Sustainability and climate change strategy, programs and transparent communications including our website, this CDP, carbon footprint of new product (e.g. biodegradable filters) and packaging developments. We are also looking at initiatives – including strengthening our product LCA – that can help us build closer cooperation within our value chain to help our stakeholders understand environmental impacts of different packaging alternatives.	The internal costs associated with these actions are estimated at in excess of US \$1M. Research costs such as for biodegradable filters can be US\$ 1-2M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	<p>environmental reputation of companies and brands could play an increasing role in product demand. Litter from cigarette butts and packaging is an issue that comes under regular public scrutiny. In many of our markets, such as the Philippines, Japan and Switzerland, PMI actively supports programs and campaigns for responsible litter disposal.</p>								
Changing consumer behaviour	<p>Consumers' increased awareness and demands for environmental sustainability claims on the products they buy could drive more manufacturers to display their environmental performance on their packaged products. While this is an opportunity for manufacturers to develop more sustainable products and communicate to their consumers, it could be a challenge for PMI and in general for the tobacco industry due to packaging labeling restrictions on tobacco products. While this risk is not yet materialized, examples of</p>	Reduced demand for goods/services	>6 years	Direct	Unlikely	Low-medium	As above - several millions of dollars.	Corporate Sustainability and climate change strategy, programs and transparent communications including our website, this CDP, carbon footprint of new product and packaging developments.	The internal costs associated with these actions are estimated at in excess of US \$1M.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	packaging labeling restrictions are discussed or in some cases already in practice in Australia, EU and Canada.								
Reputation	There is a risk that society does not view our company positively with respect to our environment and climate change credentials. The investor and consumer perceptions about PMI's climate change actions could affect the reputation and consumer demand for our products and may limit investment opportunities. While we consider this risk to be low, PMI focuses on mitigating this risk by continuously reducing our Scope 1, 2 and 3 emissions and focusing on other areas of environmental sustainability.	Reduced demand for goods/services	>6 years	Direct	Unlikely	Low	As above - several millions of dollars.	Corporate Sustainability and climate change strategy, programs and transparent communications including our website, this CDP, carbon footprint of new product and packaging developments. Our programs to drive our performance improvement, such as the Energy Management Program and our renewables strategy are particularly important.	As an example we will have invested over US\$70M in our Energy Management Program from 2010-15.
Fluctuating socio-economic conditions	Physical changes in climate such as global warming are projected to result in decreased water availability and crop productivity in many parts of the world. There is also a risk that the exacerbation of the recent economic crisis due	Reduction/disruption in production capacity	>6 years	Direct	About as likely as not	Low	Fluctuating socio-economic conditions exacerbated by climate change related issues could increase price sensitivity and lead to the need to adjust product portfolios. If these risks were	General business risk management and forecasting - managing our supply chain and making adjustments to our procurement patterns and inventory management.	This is an internal cost within the general running of our business and is not separately quantifiable.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	<p>to climate change could disrupt tobacco growing / production capacity and also further impact consumer's disposable income. For example, Africa's vulnerability to climate change is linked to the strength of the agricultural industry in many African countries; PMI sources 15% - 20% of its tobacco from Africa. Climate change could impact land and resource availability (due to migration to cities) as well as resulting in lower crop yields and quality. This in turn could impact PMI's tobacco sourcing strategy.</p>						<p>to materialize then they could impact our business by several millions of dollars.</p>		
<p>Increasing humanitarian demands</p>	<p>The risk that climate change related issues cause agricultural prioritization for food crops over non-food crops. Extreme weather conditions such as droughts and heavy precipitation, linked to the population size of communities could be disrupting factors to non-food production capacity, as the growing demand for food crops could be prioritized over non-food crops. Specifically in Africa there is a risk in</p>	<p>Reduction/disruption in production capacity</p>	<p>>6 years</p>	<p>Direct</p>	<p>About as likely as not</p>	<p>Low-medium</p>	<p>It is possible that future regulatory initiatives could seek to prioritize agricultural food crops (in terms of water supply, land availability etc.) over non-food crops, thereby impacting the security of our supply chain. If this risk were to materialize then it could impact our business by many millions of dollars.</p>	<p>PMI has developed a Good Agricultural Practices (GAP) program to specifically address and minimize the impacts of tobacco farming and protect our supply chain in the long term. See attached GAP description at the end of this section. GAP includes a sections on water use and minimization which also covers security of supply issues. Many projects that we are involved in support water security measures across</p>	<p>This is largely an internal cost which is estimated at over US\$1M per year. In terms of GAP activities, we have invested around \$20M to date for one set of programs and in an average year expect to invest \$2-5M.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	some areas that shortages of wood could lead to prioritized consumption for other purposes and thereby restrict the use of wood as a fuel for curing tobacco.							communities, not just focused on tobacco growing (e.g. water dams in Malawi). In addition, during 2013 we implemented initiatives such as Integrated Production Systems which supports farmers to improve yield and farm efficiency on a variety of crops (particularly food crops), not just tobacco.	

Further Information

Good Agricultural Practices information attached.

Attachments

https://www.cdp.net/sites/2014/12/14712/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/PMI_2013_GAP.pdf

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Expansion of EU Emissions Trading Scheme or similar schemes to other countries	Reduced operational costs	3 to 6 years	Direct	More likely than not	Low	Estimated at up to US\$1M based on	We track this through our Energy	There is no additional cost associated with

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and regions (e.g. Australia, Mexico) or in the growth of other PMI factories in the EU or EU accession countries. There is the potential to use our experience of these schemes to enable performance ahead of allocated emissions and thereby generate carbon credits. Starting from 4 EU affiliates (Netherlands, Germany, Poland, and Portugal) which are currently in the EU ETS, there could be the potential to trade internally with other PMI affiliates and generate Energy and CO2 savings.						current financial exposure in the EU and potential future inclusion of larger manufacturing centers such as in Russia.	Management Program and regulatory radar screen.	this as we are already implementing our Energy Management Program and radar screen. However, the cost of this program is over US\$70M from 2010-2015.
Fuel/energy taxes and regulations	Subsidies for renewable Energy generation have been developed in many different countries and we factor in these subsidy plans to our cost-benefit analyses for pertinent projects so that improved return on investment can potentially be delivered. Cost-Benefit analyses and renewable energy assessments have been performed in Turkey, Philippines, Portugal and Poland. We also have the potential to identify and support CDM project opportunities for our tobacco leaf suppliers.	Other: Reduced operational costs and Energy security	3 to 6 years	Direct	More likely than not	Low	Estimated at over US\$1M.	We track this through our Energy Management Program and regulatory radar screen.	As above.
Fuel/energy taxes and regulations	Compliance with country specific legislation provides PMI with the opportunity to reduce energy consumption and lower our CO2 emissions, and therefore reduce our operational cost. Such opportunities exist in the form of: a) Energy taxes, such as in Germany, which encouraged PMI to	Other: Reduced operational costs and Energy security	3 to 6 years	Direct	More likely than not	Low	Estimated at up to US\$800,000 energy tax reduction in Germany based on ISO 50001 certification.	We track this through our Energy Management Program and regulatory radar screen.	The cost for ISO 50001 development and certification is estimated to be no more than US\$50,000 per location.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>implement an Energy Management Program to ISO 50001 that will allow us to reduce energy tax costs.</p> <p>b) EU ETS - 4 EU affiliates (Netherlands, Germany, Poland, and Portugal) and the potential to trade internally with other PMI affiliates that could generate Energy savings.</p> <p>Opportunities are linked to widening markets and EU ETS carbon trading processes to include EU accession countries where PMI has facilities. Also, in Switzerland our affiliate has obtained CO2 tax exemptions due to energy saving objectives and programs that are in place within PMI.</p> <p>c) Energy Efficiency Directive – promoting energy reduction at source (all EU factories) and reviewing the potential for combined heat and power.</p> <p>d) Incentives & Infrastructure/Buildings upgrade – for renewable energy and buildings upgrade</p> <p>e) Energy Labeling Directive – for PMI's conventional products and potential future Reduced-Risk Products (which can have related electronic components).</p>								

CC6.1b

Please describe the opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean	Tobacco curing is an important step in tobacco		>6 years		About as likely as not	Low	The financial benefit is in terms	Through implementation of	Barn conversion costs can be

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
(average) temperature	production. Around 8 metric tonnes of wood can be used per tonne of cured tobacco. Due to potential physical climate changes, such as an increase in temperature, PMI may have a reduced need for energy (tonnes of wood), or other energy sources (such as renewable technologies) could become more cost effective. While this is an opportunity for the future, we already have focused programs to increase the efficiency of our curing barns. We have helped our tobacco suppliers finance efficiency improvements for over 7000 curing barns, generating an estimated saving of over 300,000 trees equivalent.	Increased production capacity		Indirect (Supply chain)			of reduced fuel wood costs for tobacco farmers, however corresponding reductions in the cost of production can lead to a benefit for PMI in the order of US\$10M.	our Good Agricultural Practices (GAP) program.	approximately US\$10M per year.
Change in mean (average) precipitation	Supply Chain-Tobacco Leaf: Tobacco leaf growing is strongly influenced by physical climate change such as changes in precipitation. PMI sources tobacco from over 30 countries across the world. Increased precipitation could impact the tobacco leaf life cycle stages (seedling, transplanting, growing, harvesting). Water-short leaf growing areas could benefit from increases in precipitation (i.e. level, timing and variability) due to increases in soil moisture. This could positively impact the tobacco crop patterns; crop production capacity and quality. Continuous Production (crop production all year round)	Increased production capacity	>6 years	Indirect (Supply chain)	About as likely as not	Low	Increased tobacco and clove yields can provide benefits in excess of US\$10M.	We continually assess promising tobacco leaf and clove growing areas and assess if climate change elements could favor increased yield. We implement our Good Agricultural Practices (GAP).	The cost of this work is mainly internal time and resources, and is estimated at up to US\$1M per year. Implementation of specific programs like continuous production is additional.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	could become more applicable.								
Change in mean (average) precipitation	Supply Chain-Clove production: Clove is an essential raw material for PMI to use in our local kretek brands. Indonesia produces over 70% of the world's cloves. It takes at least 5-7 years for clove trees to become productive and 20-40 years before they reach peak production. Yields are complex; harvests can vary by up to 60% over a 4 year harvest cycle. Clove production is weather sensitive, and climate changes such as steady rainfall could provide steady wet season for clove growing areas increasing the clove production volume and improving the crop quality.	Increased production capacity	>6 years	Indirect (Supply chain)	About as likely as not	Low	Increased clove yields can provide benefits in the order of US\$10M.	We continually assess promising tobacco leaf and clove growing areas and assess if climate change elements could favor increased yield. We implement our Good Agricultural Practices (GAP).	The cost of this work is mainly internal time and resources, and is estimated at US\$1M per year. Implementation of specific programs is additional.

CC6.1c

Please describe the opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	We expect that by tackling sustainability and climate change issues appropriately, our company reputation could be enhanced. Opportunities for PMI include the following: 1) Appropriate product labeling of sustainability performance for PMI's customers and consumers. This could be an outcome of a rigorous verified product LCA of PMI's products to identify their life cycle CO2 emissions	Increased demand for existing products/services	1 to 3 years	Direct	About as likely as not	Low-medium	As an estimate, US\$10M.	Corporate Sustainability and climate change strategy, programs and communications including this CDP.	The internal costs associated with these actions are estimated at US\$2M.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>performance. Displaying such sustainability performance on our products could enhance the differentiation of PMI's brands and increase the company's competitive advantage. 2) Environmental information for our key accounts/ retailers: to meet the growing interest of our key accounts/ retailers in sustainability practices, we continue to increase our emphasis on our products' LCA within our value chain and provide company information on our sustainability performance. 3) Supply Chain engagement - we are working towards strengthening our product LCA process to help us build closer cooperation within our supply chain and help our partners to understand the upstream environmental impacts of different material alternatives (e.g. for packaging components) and the direction PMI is taking in product developments. In PMI, we closely follow consumer and market sustainability trends and engage with our suppliers on the development of new materials to be in line with these growing trends. Leading performance in these areas could attract new investors and also increase our attractiveness as an employer.</p>								
Changing consumer behaviour	Consumers are increasingly interested in climate change and sustainability aspects of products and many of our trade customers reflect that interest. By working with our	New products/business services	1 to 3 years	Direct	More likely than not	Low	Successful product developments could provide benefits of over US\$10M.	Corporate Sustainability and climate change strategy, programs and communications	The internal costs associated with these actions are estimated at US\$2-5M.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	customers, sharing company performance strategies and assessing changes due to product developments, we could provide more detailed information on our environmental performance. Specifically, environmental performance information relating to individual product/packaging components could improve the differentiation of PMI's brands and increase our competitive advantage. Furthermore, trends in eco products increase the demand for, and availability of, new environmentally sustainable materials, or new usage of existing materials. An example of this in PMI includes the use of rice husk briquettes as fuel in the Philippines, and nut kernels as fuel in Indonesia.							including this CDP, carbon footprint of new product and packaging developments.	

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Fri 01 Jan 2010 - Fri 31 Dec 2010	443186	470864

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
Defra Voluntary Reporting Guidelines

Please select the published methodologies that you use

ISO 14064-1

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Other: see attached Excel spreadsheet		Other: see attached excel spreadsheet	see "Further information" below

Further Information

For Scope 2, we used International Energy Agency's CO2 emissions per kWh from electricity generation per country, unless specific country level information and related instruments were available.

Attachments

[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Fuel Conversion and GHG Emission Factors 2013.xlsx](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Fuel%20Conversion%20and%20GHG%20Emission%20Factors%202013.xlsx)

Page: CC8. Emissions Data - (1 Jan 2013 - 31 Dec 2013)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

420206.6

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

408200

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 2% but less than or equal to 5%	Extrapolation	Main item - for some of our offices and warehouses there is no primary data available currently and therefore extrapolation from available secondary data has been estimated.	More than 2% but less than or equal to 5%	Extrapolation	Main item - for some of our offices and warehouses there is no primary data available currently and therefore extrapolation from available secondary data has been estimated.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Reasonable assurance	https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/CC8.6a/PMI Greenhouse gas emission statement for 2013.pdf	SGS certificate reference CCP 187921/1/PMI/2013/03/14 pages 1-3.	ISO14064-3	100

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 2 emissions verified (%)
Reasonable assurance	https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/CC8.7a/PMI Greenhouse gas emission statement for 2013.pdf	SGS certificate reference CCP 187921/1/PMI/2013/03/14 pages 1-3.	ISO14064-3	100

CC8.8

Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

Additional data points verified	Comment
Other:	Operations EHS KPIs such as lost time injuries.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

Yes

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

560.8

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Argentina	9808.0
Australia	2338.3
Brazil	13554.8

Country/Region	Scope 1 metric tonnes CO2e
Canada	6218.4
Colombia	2893.7
Costa Rica	561.5
Czech Republic	4782.4
Dominican Republic	504.6
Ecuador	1276.4
Germany	22802.3
Greece	2005.1
Indonesia	21666.7
Italy	582.0
Jordan	557.3
Kazakhstan	3445.5
South Korea	2354.1
Lithuania	3568.2
Malaysia	10399.7
Mexico	8124.5
Netherlands	29488.8
Pakistan	13674.0
Philippines	43070.2
Poland	13660.8
Portugal	8831.2
Romania	2889.7
Russia	32658.3
Senegal	634.8
Serbia	2334.6
South Africa	2526.0
Switzerland	3692.5
Turkey	6825.8
Ukraine	5883.4
Venezuela	0.0
Rest of world	136593

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Manufacturing	283613

Activity	Scope 1 emissions (metric tonnes CO2e)
Vehicle Fleet	125902
Aircraft	3087
Offices	7604

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for CC8.3 (MWh)
Argentina	15396.2	41951.6	
Australia	7297.3	8677.0	
Brazil	2541.7	29215.3	
Canada	536.3	19262.2	
Colombia	1819.0	10335.0	
Costa Rica	83.8	1497.2	
Czech Republic	14580.4	24754.5	
Dominican Republic	2108.5	3579.8	
Ecuador	1318.8	4323.2	
Germany	0	72370.5	72297.5
Greece	11474.1	15980.7	
Indonesia	78709.3	111014.5	
Italy	2814.7	6932.8	
Jordan	2551.8	4508.6	
Kazakhstan	5470.6	13574.6	
South Korea	9024.3	16931.2	
Lithuania	6386.5	18951.2	
Malaysia	10847.7	14921.2	
Mexico	11311.4	24860.2	
Netherlands	28496.1	81417.3	12000.0
Pakistan	3282.1	7722.7	
Philippines	42013.2	87345.4	
Poland	37244.0	51639.0	

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for CC8.3 (MWh)
Portugal	6034.6	23665.2	
Romania	4842.1	11724.2	
Russia	34998.6	91142.2	
Senegal	2269.3	3562.6	
Serbia	7620.1	10612.9	
South Africa	3020.8	3258.6	
Switzerland	317.9	11774.9	1132.6
Turkey	22173.3	48202.8	
Ukraine	10480.3	26735.6	
Venezuela	807.1	3057.1	
Rest of world	20328	0	

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By activity

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions (metric tonnes CO2e)
Manufacturing	387872
Offices and datacenters	20328

Further Information

"Rest of World" includes offices where electricity consumption data is currently not calculated ["0" value in column "Purchased and consumed electricity, heat, steam or cooling (MWh)"].

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	1633919
Electricity	900471
Heat	73
Steam	4884

Energy type	MWh
Cooling	0

CC11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	852108.3
Diesel/Gas oil	290335.0
Brown coal	36805.7
Biodiesels	117.6
Butane	45.8
Distillate fuel oil No 4	97129.5
Coking coal	6724.9
Liquefied petroleum gas (LPG)	46210.5
Motor gasoline	286852.2
Propane	89.2
Biogasoline	3037.8
Jet kerosene	14462.4

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment
Tracking instruments, Guarantees of Origin	85430.1	Germany, Netherlands and Switzerland

Further Information

Attachments

[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_PMMG.pdf](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_PMMG.pdf)
[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/SwissHydroCertificate.jpg](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC11.Energy/SwissHydroCertificate.jpg)
[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_BoZ.pdf](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_BoZ.pdf)
[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_f6.pdf](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC11.Energy/GreenEnergyCertificate_2013_f6.pdf)

Page: CC12. Emissions Performance

CC12.1

How do your Gross Global Emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	4.2	Decrease	We had a 5.4% decrease in our absolute CO2 emissions, driven by the 4.2% decrease due to emission reduction initiatives. The main items were an increase in the efficiency of our vehicle fleet by nearly 4%, over 6% reduction in Scope 2 emissions from manufacturing (driven by both renewable energy uptake and energy efficiency projects) and over 7% reduction in Scope 1 emissions from manufacturing (driven by fuel switching and energy efficiency projects).
Divestment			
Acquisitions			
Mergers			
Change in output	1.3	Decrease	Reduction in production volumes in 2013, partially offset by some increasing production complexity and an increase in the km driven by our vehicle fleet by 5.5%.
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.00001035	metric tonnes CO2e	unit total revenue	8.6	Decrease	Decrease in absolute CO2 emissions by 5.4%, mainly from our manufacturing facilities, while increasing net total revenues by 3.4% (including excise taxes). The overall emissions reduction in manufacturing breaks down to: over 6% reduction in Scope 2 emissions (driven by both renewable energy uptake and energy efficiency projects) and over 7% reduction in Scope 1 emissions from manufacturing (driven by fuel switching and energy efficiency projects). We note that in our response last year, the answer to question 12.2 was given in million units of revenue (the answer was 11.32 or 0.00001132 when converted to the same units as this year).

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
9.09	metric tonnes CO2e	FTE employee	9.6	Decrease	Decrease in absolute CO2 emissions by 5.4%, mainly from our manufacturing facilities, while increasing the total number of employees from 87,100 to 91,100 (4.6%). The overall emissions reduction in manufacturing breaks down to: over 6% reduction in Scope 2 emissions (driven by both renewable energy uptake and energy efficiency projects); and over 7% reduction in Scope 1 emissions from manufacturing (driven by fuel switching and energy efficiency projects).

CC12.4
Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.727	metric tonnes CO2e	unit of production	0.5	Decrease	We decreased our CO2 intensity from 731kg CO2 per million cigarettes equivalent (this is our unit of production) in 2012 to 727kg CO2 per million cigarettes equivalent in 2013. This was driven by our Energy Management Program activities, (details provided in section 3.3) and renewable energy projects, offset by a decrease in production volumes. This covers Scope 1 and 2 emissions from our manufacturing facilities.

Further Information

Page: CC13. Emissions Trading

CC13.1
Do you participate in any emissions trading schemes?

Yes

CC13.1a
Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Tue 01 Jan 2013 - Tue 31 Dec 2013	9410	955	11632	Facilities we own and operate
European Union ETS	Tue 01 Jan 2013 - Tue 31 Dec 2013	21267	5700	21977	Facilities we own and operate
European Union ETS	Tue 01 Jan 2013 - Tue 31 Dec 2013	4653	5208	7950	Facilities we own and operate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Tue 01 Jan 2013 - Tue 31 Dec 2013	9714	0	11639	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Through our Global Energy Management Program, paired with local reduction initiatives, we have targeted Energy and CO2 savings that will reduce the need for purchasing allowances.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit Purchase	Other: Various projects including wind, reforestation and biomass	A selection of CDM and other recognized projects (e.g. VER) from the GoGreen program run by DHL.	CDM (Clean Development Mechanism)	253	253	Not relevant	Voluntary Offsetting

Further Information

Attachments

[https://www.cdp.net/sites/2014/12/14712/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC13.EmissionsTrading/GoGreen Certificate - Philip Morris - Europe.pdf](https://www.cdp.net/sites/2014/12/14712/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC13.EmissionsTrading/GoGreen%20Certificate%20-%20Philip%20Morris%20-%20Europe.pdf)

Page: **CC14. Scope 3 Emissions**

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, calculated	3850000	Includes Tobacco (including the impact of curing tobacco) and direct materials, composing the cigarette, the pack and transport packaging (packaging, cigarette papers, acetate tow for filters, etc.). Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint, have been modeled using the Life Cycle Assessment (LCA) tool, Simapro. For our base year in 2010, we undertook a 3rd party review against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative. We have extrapolated our carbon footprint based on production volume changes.	40.00%	Based on our current LCA. We continue our engagement process with direct materials and other suppliers in order to get more primary data. This year we have joined CDP Supply Chain to support this process.
Capital goods	Relevant, calculated	110000	Emission factors for infrastructure (taking the proxy of a chemical factory), were used from a life cycle assessment database, ecoinvent v2.2, and modeled in Simapro.	10.00%	Existing infrastructure emissions were calculated during our original carbon footprint calculation and we use that to estimate the carbon emissions related to the manufacture and transport of capital goods (equipment, machinery, buildings, facilities, and vehicles) purchased by PMI annually.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	183500	GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The emissions are calculated by multiplying fuel quantities and electricity purchased by upstream and T&D GHGs emission factors. When no emission factor is available for a specific country, the emission factor provided by DEFRA for the corresponding region is applied. Quality: The quality of the primary data used is high and the quality of the secondary data is medium. The quality of the emissions data is considered as medium.	100.00%	The primary data used are the types and quantities of fuels and electricity used by PMI in 2013. Secondary data are used for upstream and T&D GHGs emission factors. For fossil and biogenic fuels, the emission factors are global without geographic differentiation. For electricity, T&D losses and heat losses, GHGs emissions are specific to each country or region. The activity data come from PMI's internal reporting tool. The GHGs emission factors used are taken from DEFRA guidelines for GHG accounting - 2013 and ecoinvent v2.2.
Upstream transportation and distribution	Relevant, calculated	332000	Estimates for tobacco and direct materials transport. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint, have been modeled using the LCA tool, Simapro. For our base year in 2010, we undertook a 3rd party review against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	25.00%	Based on estimated distances travelled.
		9800		100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
Waste generated in operations	Relevant, calculated		GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The waste flows are broken down in 51 different waste types and treatment methods. The waste-type specific method is used to calculate GHG emissions. Each treatment is associated with an emission factor to assess the GHGs emissions (secondary data) from the treatment (ecoinvent 2.2, IPCC 2007 GWP100). As per the Technical Guidance for Calculating Scope 3 Emissions of the GHG Protocol (p.80), emissions from incineration with energy recovery and from recycling are not included in the assessment, to avoid double counting. An estimation of the emissions from the transportation of the waste to the recycling or incineration facility is performed. The emissions from this transportation step are calculated as follow: 0.134 (transport, lorry >16t, fleet average, RER, in CO2-eq / tkm) * 35 km (assumption) * mass of waste recycled or incinerated with energy recovery (in tonnes). It is assumed that the paper, cardboard and acetate tow sent to composting are fully degraded and therefore emit only biogenic CO2, not reported in the scope 1,2 and 3 of the GHG protocol. The transportation of this waste to the composting facility is accounted for. Quality: The quality of the primary data used is high. However, due to the simplification involved in the modeling (no geographical differentiation on the waste treatment was made), therefore the overall quality of the emission is estimated as medium.		The primary data used for this category are the mass of waste generated in production centres, excluding office waste. The secondary data are the emission factors for the different waste treatment, taken from a life cycle assessment database, ecoinvent v2.2.
Business travel	Relevant, calculated	59934	Through air miles accounting, using the Guideline to DEFRA / DECC's GHG Conversion Factors for Company Reporting, Annex 6: average Air Passenger Transport Conversion Factors for "Premium Economy class".	85.00%	Covering 78 countries through PMI air miles accounting.
Employee commuting	Relevant, calculated	98000	Estimated based on average commute distances and transport methods across 91,100 employees using data extrapolation from our own fleet of vehicles.	10.00%	Only some sites have undertaken mobility surveys of employees (commuting), therefore primary data is limited.
Upstream leased assets	Not relevant, explanation provided				Our upstream leased assets are not material to our carbon footprint, associated emissions are small in comparison to our total Scope 3 emissions and do not meet our 5% materiality threshold.
Downstream transportation and distribution	Relevant, calculated	518000	Distribution of finished goods; estimate based on 8 key markets extrapolated for the whole of PMI. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint, have been modeled using the LCA tool, Simapro. For our base year in 2010, we undertook a 3rd party review against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	25.00%	Based on estimated distances for defined transport means in 8 key markets.
Processing of sold products	Not relevant, explanation provided				Not relevant since our sold products are not processed.
Use of sold products	Relevant, calculated	147000	This assumes the use of cigarette lighters. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data),	20.00%	Based on estimated usage of lighter fuel per cigarette.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
			including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint, have been modeled using the LCA tool, Simapro. For our base year in 2010, we undertook a 3rd party review against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.		
End of life treatment of sold products	Relevant, calculated	12000	Downstream waste treatment and street cleaning related to cigarette butts and waste packaging. Our carbon footprint is based on actual data (primary data) and average industry data (secondary data), including a number of estimates and assumptions, using impact databases. Elements of our carbon footprint, have been modeled using the LCA tool, Simapro. For our base year in 2010, we undertook a 3rd party review against ISO 14040 series of standards and the draft Scope 3 Accounting and Reporting Standard as released by the WBCSD / WRI GHG Protocol Initiative.	10.00%	Based on Swiss market assumptions and extrapolation.
Downstream leased assets	Not relevant, explanation provided				Our downstream leased assets are not material to our carbon footprint, associated emissions are small in comparison to our total Scope 3 emissions and do not meet our 5% materiality threshold.
Franchises	Not relevant, explanation provided				No existing franchise business.
Investments	Not relevant, explanation provided				Our investments are not material to our carbon footprint, associated emissions are small in comparison to our total Scope 3 emissions and do not meet our 5% materiality threshold.
Other (upstream)					
Other (downstream)					

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification underway but not yet complete – first year it has taken place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)
Third party verification/assurance underway		Statement not yet available - work in progress. We are undertaking third party verification for our business travel emissions, which whilst only 2% of our baseline Scope 3 emissions, still amounts to around 60,000 tonnes of CO2 per year.	ISO14064-3	2

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Change in methodology	15	Decrease	Corrections made during data verification and updating our air miles conversion factor (DEFRA) which now includes factors for distance uplift and radiative forcing.
Purchased goods & services	Emissions reduction activities	1	Decrease	Based on reductions in CO2 emissions from tobacco agriculture improvement projects as identified in section 3.3.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	7	Decrease	Corresponding a 7% reduction in energy used in 2013 compared to 2012.
Waste generated in operations	Emissions reduction activities	9	Decrease	Corresponding to a 9% reduction in total waste and a 30% reduction in waste sent for final disposal in 2013 compared to 2012.
Upstream transportation & distribution	Emissions reduction activities	0.2	Decrease	Load optimization and change in transport method from land to sea.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers
Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

Our suppliers:

We have used our carbon footprint calculation to identify the main climate change impacts of our purchased materials. In our direct materials (non-tobacco) area we identified acetate tow and consumer board & paper as significant contributors from a raw materials perspective to our carbon footprint and this is why we prioritized engagement with suppliers in these areas. We engaged with key suppliers in these two areas through direct discussions and a questionnaire to ascertain carbon related strategies and performance and as a means of assessing the value of joining CDP Supply Chain. As a measure of success, 90% of the suppliers surveyed engaged with us on this subject. From this basis we decided to join CDP Supply chain in 2013 and are involved in the process for the first time in 2014. We aim to have at least 80% of our invited suppliers to engage with us through CDP Supply Chain and in the medium term will use this forum to drive decreases in our value chain emissions where, depending on the Scope 3 area, we are aiming to reduce emissions by 30% by 2020.

We also engage with our suppliers regularly in the following main areas:

- Tobacco leaf suppliers – through Good Agricultural Practices (GAP) collaboration.
- Direct Materials suppliers – through procurement and product development activities which include the definition of parameters of environmental performance for different raw material components.
- Equipment manufacturers – through an industry colloquium which helps target energy efficiency developments for our manufacturing equipment.

Our customers:

We have engaged with Tesco to support their own carbon footprint reduction target for their supply chain. We also regularly share information with other key accounts and stakeholders through questionnaire responses and presentations.

We prioritize engagement as follows:

- 1) Our Customers
- 2) Based on share of our carbon footprint
- 3) Based on our climate change risk assessment

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment
23	70%	23 Direct Material suppliers representing 70% of Direct Materials total spend.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	We will include their primary data in our future carbon footprint reviews to improve the accuracy of estimated data. We will consider supplier/customer data and climate change strategies in our road-map for our carbon footprint reduction targets for our entire supply chain / value chain. We will seek to share best practices.

Further Information

We are undertaking third party verification for our business travel emissions, which whilst only 2% of our baseline Scope 3 emissions, still amounts to around 60,000 tonnes of CO2 per year.

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Andy Harrop	Director EHS&S Sustainability and Performance	Environment/Sustainability manager

Further Information

Module: FBT

Page: FBT1. Agriculture

FBT1.1

Are agricultural activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT1.2

Are agricultural emissions that you have identified as relevant produced on your own farm(s), elsewhere in your value chain, or both?

Elsewhere in value chain

FBT1.2a

Please explain why agricultural emissions from your own farms are not relevant

We do not own farms

FBT1.5

Do you account for emissions from agricultural activities in your value chain as part of the Scope 3 category "Purchased goods and services" reported in CC14.1 of the core climate change questionnaire?

Yes

FBT1.6

Do you encourage your agricultural suppliers to undertake any agricultural management practices with a climate change mitigation and/or adaptation benefit?

Yes

FBT1.6a

Please identify agricultural management practices with a climate change mitigation and/or adaptation benefit that you encourage your suppliers to implement. Complete the table

Activity ID	Description of activity	Your role	Description of role	Driver	Comment
1	Good Agricultural Practices (GAP) program	Other: We mandate GAP for suppliers of tobacco to PMI	GAP defines the principles and measurable standards to be met by all those who grow and supply tobacco to PMI. These principles and standards are organized around three focus areas (pillars): Crop, Environment, and People (Agricultural Labor Practices (ALP)). Governance is the foundation of these pillars and incorporates the management processes that must be put in place to successfully implement GAP. The Environment pillar covers sustainable water management, soil management/conservation, energy and raw material efficiency, waste management, biodiversity and the sustainable use of wood.	Emissions reductions and increasing resilience	

FBT1.6b

Does the implementation of these agricultural management practices in your value chain have secondary impacts? Complete the table

Activity ID	Impact on yield	Impact on cost	Impact on soil quality	Impact on biodiversity	Impact on water	Other impact	Description of impacts	Management of impacts
1	Yes	Yes	Yes	Yes	Yes	Yes	Actually these are primary impacts rather than secondary - each of these impacts areas is directly addressed for improvement by our GAP program. Other impacts include waste reduction and raw materials optimization.	Through the GAP program, see 1.6d.

FBT1.6c

Do you have any plans to engage with your suppliers on their implementation of agricultural management practices?

Yes

FBT1.6d

Please detail these plans to engage with your suppliers on their implementation of agricultural management practices

GAP is mandatory for all suppliers of tobacco to PMI, as is reflected in all PMI's and its affiliates' supply contracts. PMI expects all its' suppliers to continuously improve in the implementation of GAP principles and standards, working with the farmers from whom they purchase.

Suppliers are required to conduct annual self-assessments of their GAP implementation and are provided with a management tool and set of measurable standards against which they rate themselves. Further, the information resulting from the farm by farm monitoring of the measurable standards is consolidated into Key Performance Indicators that are used to assess suppliers' improvement in GAP over time. Farmers' and suppliers' progress in GAP implementation is now monitored by external third parties who will complete a formal GAP assessment to verify supplier self-assessments every three years. Additionally, for the People Pillar of GAP (Agricultural Labor Practices (ALP)), Verité has also guided our efforts to set up a third party monitoring system with Control Union who is completing a detailed assessment of suppliers' ALP Program implementation.

Further Information

Page: FBT2. Processing

FBT2.1

Are processing activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT2.2

Are emissions from processing activities that you have identified as relevant produced in your direct operations, elsewhere in your value chain, or both?

Both direct operations and elsewhere in value chain

FBT2.3

Do you account for emissions from processing activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3 of the core climate change questionnaire?

Yes

FBT2.3a

Please report these emissions from processing activities in your direct operations and identify any exclusions in the table below

Scope	Emissions from processing activities (metric tonnes CO2e)	Exclusions	Explanation	Comment
Scope 1	14426			
Scope 2	8778			

FBT2.4

Do you account for emissions from processing activities in your value chain as part of the Scope 3 category "Purchased goods and services" and/or "Processing of sold products" reported in CC14.1 of the core climate change questionnaire?

Yes

Further Information**Page: FBT3. Distribution****FBT3.1**

Are distribution activities, whether in your direct operations or elsewhere in your value chain, relevant to your climate change disclosure?

Yes

FBT3.2

Are emissions from distribution activities that you have identified as relevant produced in your direct operations, elsewhere in your value chain, or both?

Both direct operations and elsewhere in value chain

FBT3.3

Do you account for emissions from distribution activities in your direct operations as part of the global gross Scope 1 emissions figure reported in CC8.2 and/or the Scope 2 figure reported in CC8.3 of the core climate change questionnaire?

Yes

FBT3.3a

Please report these emissions from distribution activities in your direct operations and identify any exclusions in the table below

Scope	Emissions from distribution activities (metric tonnes CO2e)	Exclusions	Explanation	Comment
Scope 1	125902			These emissions are for PMI's total vehicle fleet which does include some benefit vehicles (estimated at 10%).
Scope 2	0			

FBT3.4

Do you account for emissions from distribution activities in your value chain as part of the Scope 3 category "Upstream transportation and distribution" and/or "Downstream transportation and distribution" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

Page: FBT4. Consumption

FBT4.1

Are consumption activities relevant to your climate change disclosure?

Yes

FBT4.1a

Do you account for emissions from the consumption of your products as part of the Scope 3 category "Use of sold products" and/or "End of life treatment of sold products" in CC14.1 of the core climate change questionnaire?

Yes

Further Information

CDP